

Minutes from the Individual Sewage Disposal System (ISDS) Task Force – Regulatory Working Group Meeting December 13, 2000

The meeting was held in Conference Room 280, in the DEM's Office of Water Resources, at 235 Promenade Street.

In attendance:

Russ Chateaufneuf, Tim Stasiunas, Joe Frisella, Scott Moorehead, Tom D'Angelo, Bill Hamill, Andy Lipsky, George Loomis, Alison Walsh, Rob Adler, Tom Getz, Ernie Panciera and Deb Knauss

Russ Chateaufneuf initiated the meeting at 8:15 AM. The minutes of the meeting held November 15, 2000 were accepted as submitted.

Nitrogen Reduction Systems – when to require

As proposed at the November 29th meeting, DEM is considering requiring denitrification in the following areas for all new systems:

1. in accordance with CRMC policies, in critical resource areas as defined by the CRMC Special Area Management Plans (SAMP's)
2. in areas with ISDS and private drinking water wells in accordance with the provision below,
3. within wellhead protection areas for public wells in accordance with the provision below,
 - In areas under items 2 and 3 above, nitrogen reduction systems would be required when the system is designed to receive more than 700 gallons per day per acre. This is based on loading limit obtained by requiring a minimum of 1/6 acre per bedroom and a minimum design flow of 350 gallons per day (150 gallon per day for the first bedroom and 100 gallons per day for each additional bedroom). The 700-gallon per day per acre maximum can be determined in the aggregate.

Cluster development will be encouraged by considering overall density of a parcel: a cluster subdivision may place residences on less than .5 acre, if the density of homes with consideration of the whole parcel is greater than .5 acre. In this case nitrogen reduction systems would not be required.

MA has imposed loading limits that require ¼ acre per bedroom in nitrogen sensitive areas in an attempt to protect groundwater.

Suggested modifications to the proposal were:

- consult the 303(d) list for nutrient-impaired surface water bodies and use this to identify high risk areas.
- plug-in areas of critical concern from municipalities' comprehensive plans and consider studies being conducted in municipalities on sensitive areas
- do not apply the lot size criteria statewide; instead apply the denite to selected areas based on potential risk

The following concerns were expressed:

- Requiring nitrogen reducing systems would increase the cost to develop a piece of property. However, it was noted that for risky sites, conventional systems are more expensive.
- The proposal overlooks some impaired surface water bodies, for example Boone Lake in Exeter and water bodies in Gloucester.
- This proposal seems counter to Smart Growth philosophy/practice.
- These requirements are too conservative; some areas requiring nitrogen reduction under this proposal are great distances from the salt ponds. It was requested that justification that nitrogen is a risk be provided.
- future reduction of minimum lot size in municipalities
- Maintenance costs of \$200-500+ annually were cited as a hardship on homeowners.
- The requirement for nitrogen reduction should be based on protection of public health, environmental protection, a system's longevity and other site considerations that determine a cumulative risk. For example a two-acre lot with variance needs, wetlands on 50% of it, and a two-foot water table will put that lot in a higher risk category.
- The standard must consider not only density of lots, but density of ISDS, for example the west side of Jamestown, where some large lots are surrounded by small lots. In these areas, the groundwater is at risk of nitrogen contamination and denitrification systems would reduce the risk. The goal is to prevent nitrogen contamination of the resource.

- “in-fill lots”, where a small lot is surrounded by large lots, should not be required due to lot size, to have denitrification systems

Septic Tank Standards/Grease Traps

Grease Traps

Concern was expressed that revised language did not include many facilities generating large quantities of grease; it was suggested that the proposed language be modified to read: “restaurant and food preparation facilities” rather than “food service”.

The group agreed that we may want to require two compartment (grease trap) tanks or two (grease trap) tanks in series.

It was stated that there is a new grease trap design, with a different baffle configuration which more effectively removes grease and that one was installed in North Kingstown. The tank is however, a three compartment tank, which requires a variance.

It was suggested that effluent filters be required for grease traps.

Septic Tanks

It was noted that the depth requirement limits the maximum tank allowed to 8,000 gallons.

It was noted that the requirement for the first tank in a series be of greater volume than the following tank, be reconsidered. Communal systems involve smaller tanks at the residence before a larger tank receiving wastewater from several smaller individual tanks.

There was discussion regarding labeling the top of manhole covers in addition to the labeling required within the riser, with a warning that the tank contains material which may be hazardous, consistent with OSHA requirements.

The requirement in draft language for boot gaskets was questioned for all applications. It was requested that in cases where the invert is at least one-foot above the water table a friction-fit seal be considered and require the cast-in-place gasket or other equally water tight fitting only for instances where the invert is within one-foot of the water table. Concerns included: sewage could leak out of a friction fit seal; the alternative seal may introduce inconsistency in manufacturing practices (simpler to just use one type). Discussion concluded with a recommendation to leave language as proposed.

It was suggested that we require two-compartment tanks, they facilitate grease separation and CT requires them.

The requirement for gas baffles will be deleted, as they are unnecessary with effluent filters.

It is proposed in draft language that the original tank cover remain in place beneath the manhole cover to-grade due to safety concerns since children have access to the at-grade covers. Concern was expressed with the impracticality of this due to the mass of these concrete covers. It was agreed to eliminate the requirement that the lid below grade remain in place, provided locking lids or other tamper proof covers (heavy) are used.

It was suggested that only outlet access opening be required to be brought to grade, other access openings to within 6 inches of grade.

The group agreed that cast iron tees should be prohibited.

It was recommended that schedule 40 PVC tees should be solvent welded in place.

It was suggested that D-boxes be required to have manholes to-grade.

It was noted that dipper D-boxes have four openings and the draft language requires D-boxes to have a minimum of five openings. It was agreed that the language should be changed to accommodate dippers, by requiring a minimum of only four openings.

The meeting adjourned at approximately 11:10 AM.

Next Meetings

- **January 3, 2001** 8 AM to 10 AM
Conference Room 280, in the Office of Water Resources on the 2nd Floor,
235 Promenade Street
- **January 17, 2001** 8 AM to 10 AM
Conference Room 280, in the Office of Water Resources on the 2nd Floor,
235 Promenade Street
- **January 31, 2001** 8 AM to 10 AM
Conference Room 280, in the Office of Water Resources on the 2nd Floor,
235 Promenade Street